

**BALANCING THE ECOLOGICAL FOOTPRINT AND SUSTAINABLE TOURISM
IN THE LACU SĂRAT AREA, BRĂILA**

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Abstract

As a fundamental component in the worldwide evolution of eco-friendly tourism, nature conservation areas play an extremely essential role in community and provincial development. They are essential for fostering flexibility in responding to predicaments. In our country, ecotourism is included in development targets and is an important concern, as increasing tourism business in protected areas might damage them. The data used in this study comes from the General Directorate of Tourism within the Ministry of Economy, Entrepreneurship and Tourism and analyses the types of accommodation units in the Lacu Sărat Braila area, but also in the immediate vicinity. The data used in this study comes from the General Directorate of Tourism within the Ministry of Economy, Entrepreneurship and Tourism, updated at 30.06.2025 and analyses the types of accommodation units in the Lacu Sărat Braila area, but also in the immediate vicinity

Keywords: *Lacu Sărat Brăila, eco-friendly tourism, nature conservation areas*

Introduction

The territorial ecosystem integration analyses how the Lacu Sărat resort relates to the surrounding territorial ecosystem and hydrographic context, and how this broader context influences the sustainability and development of the destination's natural resources. Last but not least, the spatial vision and protection measures are taken into account, which is the ideal spatial planning scenario that ensures the protection and regeneration of essential natural resources (lake, wetland) and which are the concrete measures necessary to correct environmental dysfunctions and maximise the ecosystem opportunities of the Lacu Sărat resort.

This article aims to analyse the touristic development of the Lacu Sărat area through the perspective of sustainable management and valorisation of its natural capital, considering a series of methods for valorisation of resources, more precisely, what are the optimal methods and tools for the development and efficient use of the spa and natural resources (mud, water, microclimate) of the Lacu Sărat resort, defined on time horizons (short, medium and long). Another aspect pursued is the conditions and potential of the resources, considering the

current conditions (constraints, advantages, and capacities) of the natural resource base (e.g., pollution levels, geological reserves, mud quality) that influence or determine the future development directions of the Lacu Sărat resort.

A distinct category of surface waters in the analysed area is the therapeutic salt lakes, with sapropelic mud deposits, represented by Lacu Sărat (Brăila) and Movila Miresii (PATC Lacu Sărat, 2024). Lacu Sărat, located at an altitude of 16 m, was formed in an old course of the Danube, which was later covered by loess deposits; the lacustrine depression resulted from loess subsidence processes (Maiorescu et al., 2018).



Figure 1. Location map – Lacu Sărat I and Lacu Sărat II

Source: <https://earth.google.com>

The lake's surface area is about 1.72 km², of which Lacu Sărat I covers 0.75 km². The water depth ranges from 0.6 to 1.80 meters, and the lake bottom is entirely covered by therapeutic mud with a very high degree of mineralisation. The lake's average depth is generally low, ranging from 0.2 m to 0.5 m depending on the year's rainfall. The lake is extremely vulnerable to drought; during severe droughts (such as 1872, 1887, 1957, or 2008), it has experienced drastic reductions in water coverage or even complete drying. Of the two basins, Lacu Sărat I has an almost circular shape and is the only compartment exploited and used for therapeutic purposes. Lacu Sărat II has an elongated shape, extending about 2 km and averaging 350 m in width. From a geological point of view, Lacu Sărat is located in a depression without drainage, being completely isolated from the Danube River and having no permanent tributaries (Raport de mediu, PATC Lacu Sărat, 2023). This isolation has led to the accumulation of mineral salts, with water salinity reaching about 80 g/L (UAUIM, 2013). The lake's water volume is extremely vulnerable to drought because the lack of a stable supply from the shallow aquifer amplifies evaporation's impact.

The groundwater is the primary source of supply for Lacu Sărat, playing a vital role in preventing its complete drying out due to its endorheic (non-draining) nature. The

groundwater, situated at a shallow depth within the fine sands that predominate the area, appears either as a free level or under pressure in the lake region. Specifically, the sapropelic mud functions as an impermeable layer, forming the ceiling of the aquifer directly beneath the lake. (P.A.T.J. Brăila, 2017).

Tourism and environmental protection have long been interconnected, especially within the context of nature reserves (Matović et al, 2025). This relationship is mutually beneficial yet inherently complex, as profit-driven conservation areas rely on sightseeing for visibility and funding, while tourism depends on their eco-friendly and traditional qualities, although these concerns may sometimes conflict (Eagles et al., 2002). The tourism and accommodation sectors are widely recognised for their ability to generate significant socio-economic benefits, including employment, regional development, and intercultural exchange (D'Arco et al, 2021). However, in the context of conservation areas, tourism can also have detrimental effects, such as environmental degradation, pressure on natural resources, and disturbances caused by excess tourism or the cumulative environmental impact of tourism-related activities (Eklund et al, 2017). These risks highlight the need to integrate sustainability principles into visitor practices within nature reserves.

Accurately, environmentally friendly tourism, particularly within restricted access areas, provides a context for harmonising the eco-friendly, cost-effective, and community aspects of progress. Green tourism in conservation areas is closely aligned with the 2030 Agenda for Sustainable Development (United Nations, 2015) and promotes the achievement of various Sustainable Development Goals (SDGs). Goal 4.7, which encourages training for green development, aligns with the responsibilities of nature reserves in providing environmental education through advanced visitor and study programmes.

Materials and methods

A detailed analysis of accommodation spaces and their types, along with intensive promotion, plays a well-defined role in the development of tourism in a particular area, regardless of the type of tourism being discussed.

In the present study, the data were obtained from the General Directorate of Tourism within the Ministry of Economy, Entrepreneurship and Tourism (<https://se.situr.gov.ro/OpenData/OpenDataMain>), updated as of 30.06.2025, and are official and verified.

The natural and human-made resources in the Lacu Sărat Resort and its surrounding areas provide a strong foundation for diverse tourism activities and offer opportunities to develop new types of tourism.

The most prominent and developed form of tourism in the area is, naturally, SPA tourism (or health tourism). This is supported by a unique combination of essential factors:

- • Natural Therapeutic Factors:
- • Lake water: possesses curative properties due to its high mineral content.
- • Sapropelic mud: regarded as the most valuable therapeutic deposit in Romania.
- • Bioclimate: a specific steppe climate characterised by prolonged sunshine.
- • Dedicated infrastructure:
 - The existence of appropriately equipped SPA treatment facilities.
 - The lake has a landscaped beach that allows direct access to the mud and salt water.

Results and discussion

The development of SPA tourism, linked to the cultural, natural, and recreational potential of the surrounding area (Danube, urban centres, protected zones), enables the resort to transform from a simple health spa into a comprehensive regional health and recreation hub. The natural and human-made resources available at both the Lacu Sărat Resort and its immediate surroundings provide a favourable foundation for the practice and expansion of various types of tourism.

The most prominent and developed form of tourism in the resort is, naturally, balneal tourism (or health tourism). This sector benefits from a unique combination of natural factors: the therapeutic qualities of the lake water, the high mineral content of the sapropelic mud, the advantages of the bioclimate (with extended sunshine), and the existing tourist infrastructure, which includes specialised treatment facilities and a well-kept beach. The level of development and capacity of the tourism sector are primarily assessed through key quantitative indicators, such as the number of accommodation establishments and the total accommodation capacity in available places.

Table 1. These figures highlight the Braila tourism sector's heavy reliance on the capacity and success of the Lacu Sărat Resort.

| Type of unit | Unit name | | | Category type | Number of spaces | Number of places |
|---------------------|------------------------------------------|------------------------------|--|---------------|------------------|------------------|
| Hotel | Alma Health&Spa Chiscani Village, Brăila | Retreat, Chiscani | | 4 - stars | 185 | 366 |
| Hotel | Perla, Chiscani Village, Brăila | Chiscani Commune, | | 3 - stars | 82 | 164 |
| Hotel | Flora, Chiscani Village, Brăila | Chiscani Commune, Lacu Sărat | | 2 - stars | 106 | 212 |
| Hotel | Rebis International Commune, Brăila | Lacu Sărat Village, Chiscani | | 3 - stars | 15 | 30 |
| Hotel | Unique Garden, Commune, Vărsătura Brăila | Chiscani Village, | | 4 - stars | 15 | 30 |
| Tourist villa | Nufarul Chiscani Village, Brăila | Chiscani Commune, Lacu Sărat | | 2 - stars | 19 | 42 |
| Tourist pension | Sabrina Chiscani Village, Brăila | Chiscani Commune, Lacu Sărat | | 2 - stars | 8 | 16 |
| Tourist pension | Vis, Chiscani Village, Brăila | Chiscani Commune, Vărsătura | | 3 - daisies | 8 | 16 |
| Camping-type cabins | Donaris, Chiscani Village, Brăila | Chiscani Commune, Vărsătura | | 1 - stars | 3 | 6 |
| Rooms for rent | Laura Holiday Chiscani Village, Brăila | Chiscani Commune, Vărsătura | | 3 - stars | 14 | 28 |

| Total | 455 | 910 |
|-------|-----|-----|
|-------|-----|-----|

Source: General Directorate of Tourism within the Ministry of Economy, Entrepreneurship and Tourism <https://se.situr.gov.ro/OpenData/OpenDataMain>, updated at 30.06.2025

Regarding the comfort levels of the tourist accommodation options, the resort has facilities classified as 4-, 3-, and 2-star, with campsites excluded from this analysis. Consequently, five hotels and one other structure with rooms for rent fall into the 4-, 3-, and 2-star categories, offering a total of 802 accommodation places. Additionally, two guesthouses, one tourist villa, camping cottages, and rooms for rent are classified as 1-3 stars, providing a total of 108 accommodation places.

Figure 2. Accommodation spaces Lacu-Sărat, Brăila County

Source: processed data

<https://se.situr.gov.ro/OpenData/OpenDataMain>, updated at 30.06.2025

The analysis of accommodation capacity at the Lacu Sărat resort shows limited variety in offerings, as evidenced by the dominance of units with relatively low levels of comfort. A large share of the total available beds is in three-star structures, in contrast to the proportion of four-star units.

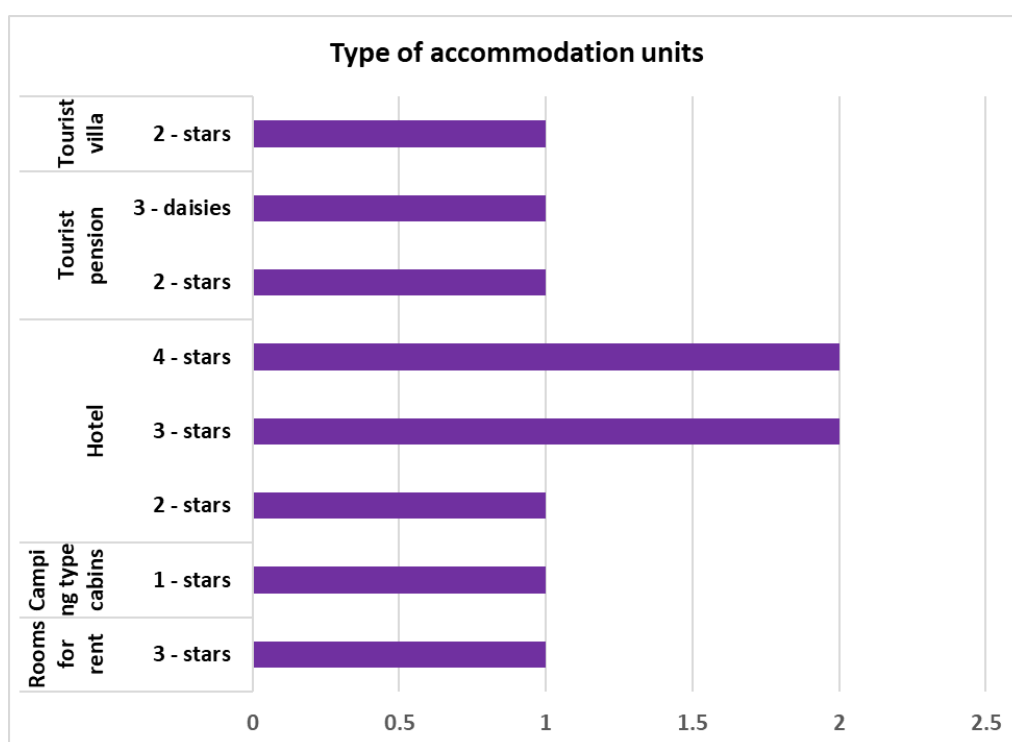


Figure 3. Type of accommodation units Lacu Sărat, Brăila County

Source: processed data

<https://se.situr.gov.ro/OpenData/OpenDataMain>, updated at 30.06.2025

This qualitative imbalance, characterised by lower overall comfort, influences the resort's overall attractiveness. Consequently, Lacu Sărat primarily targets a specific demographic: the low- and middle-income population, which limits its appeal to wealthier tourists or those seeking luxury wellness and full-service options. Although the Alma Health & Spa Retreat (4 stars), inaugurated in June 2022, is situated in an ideal location on the lake's edge and seamlessly blends into the surrounding forest landscape, it remains a premium destination focused on health and relaxation. To reposition the resort effectively, further investment in increasing both the number and quality of four- and five-star accommodation units would be crucial.

The integrated utilisation of this diverse range of resources enables the Lacu Sărat resort to transform from a solely health-focused destination into a comprehensive regional hub for health, culture, and recreation. In addition to health and cultural tourism, the Lacu Sărat area demonstrates considerable potential for developing active and business tourism.

Conclusions

The real cultural value comes from the nearby objectives. The proximity to these major urban centres gives tourists from Lacu Sărat access to a wide array of attractions with genuine tourist appeal, thereby enhancing treatment stays through cultural, historical, and leisure experiences. The combined promotion of Brăila's cultural heritage and the natural charm of Lacu Sărat is crucial for developing appealing regional tourist packages. The synergy between the spa treatment at Lacu Sărat and Brăila's cultural and historical offerings is vital for creating comprehensive tourist packages that can attract a broader range of visitors.

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